ETHICS IN JOURNAL PUBLISHING

Michele Gibney,
Head of Publishing and Scholarship Support
University of the Pacific

OUTLINE

Publishing
- Who
- Where
- Double-Dipping

Data Falsification and Replicability

Predatory Journals

Peer Review Process

Future Suggestions

THE PUBLISHING INDUSTRY IS AN ETHICAL TRAVESTY

Sexism. Classism. Racism.

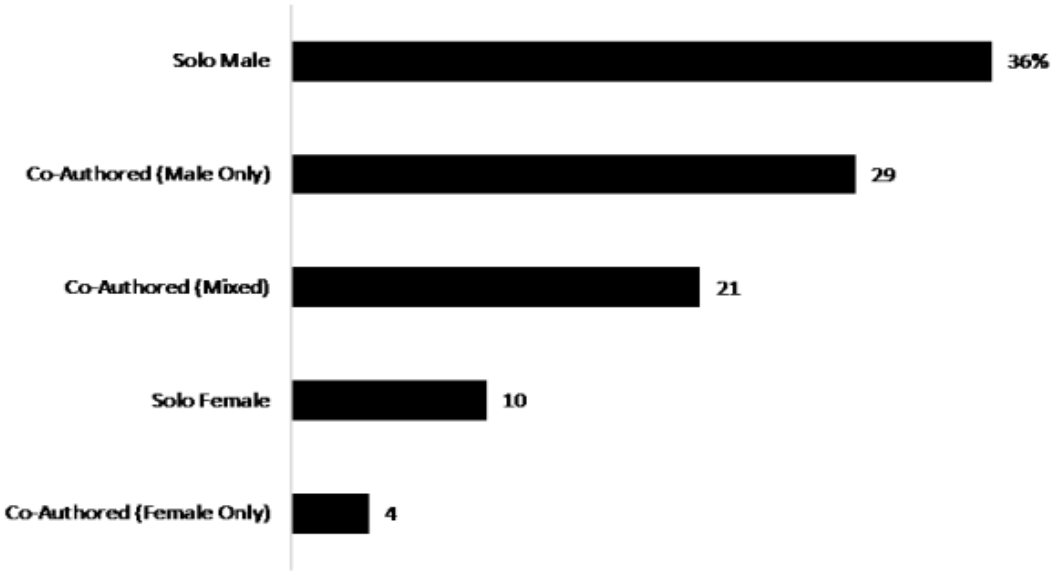
Photo by Viktor Talashuk from Pexels

WHOSE VOICES ARE HEARD?

One guess – It's old, white men.

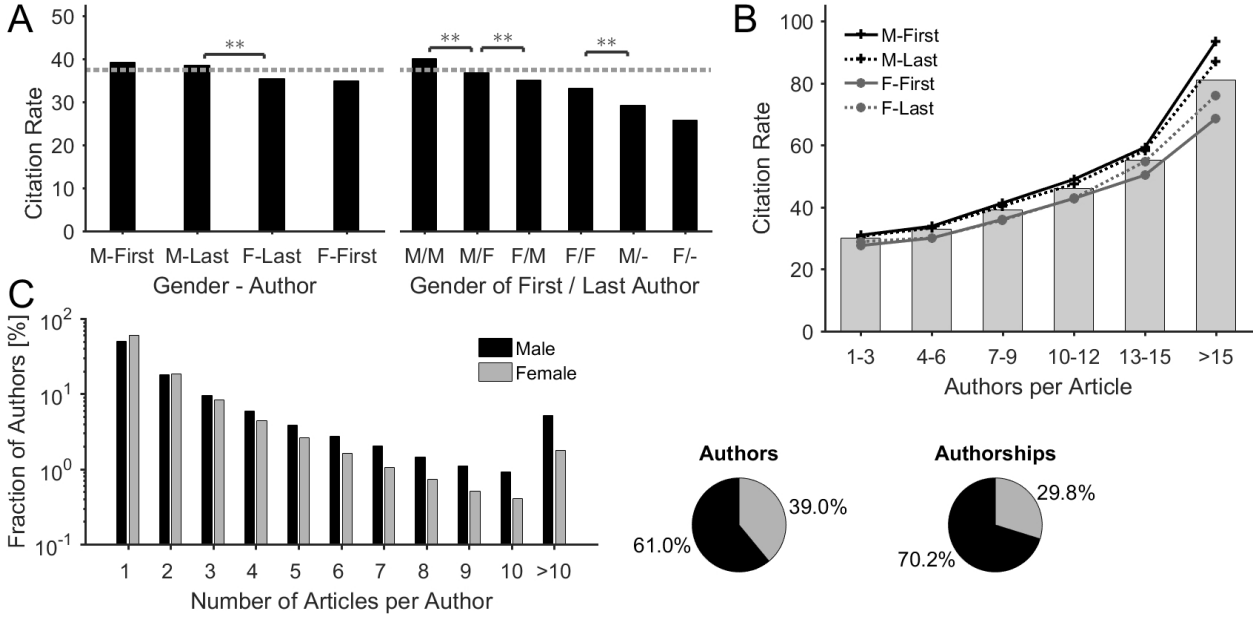
Photo by Andrea Piacquadio from Pexels

COMPARISON OF PUBLISHED VOICES



Composition of Authors for Manuscripts Submitted to *AJPS* (* 2,672 manuscript with a final decision (accept or decline) issued from January 2017 – October 2019)

https://ajps.org/2020/04/20/it-takes-a-submission-gendered-patterns-in-the-pages-of-ajps/



Gender disparities in high-quality research revealed by Nature Index journals

Fig 5. Gender-specificity of citations & scholarly productivity.

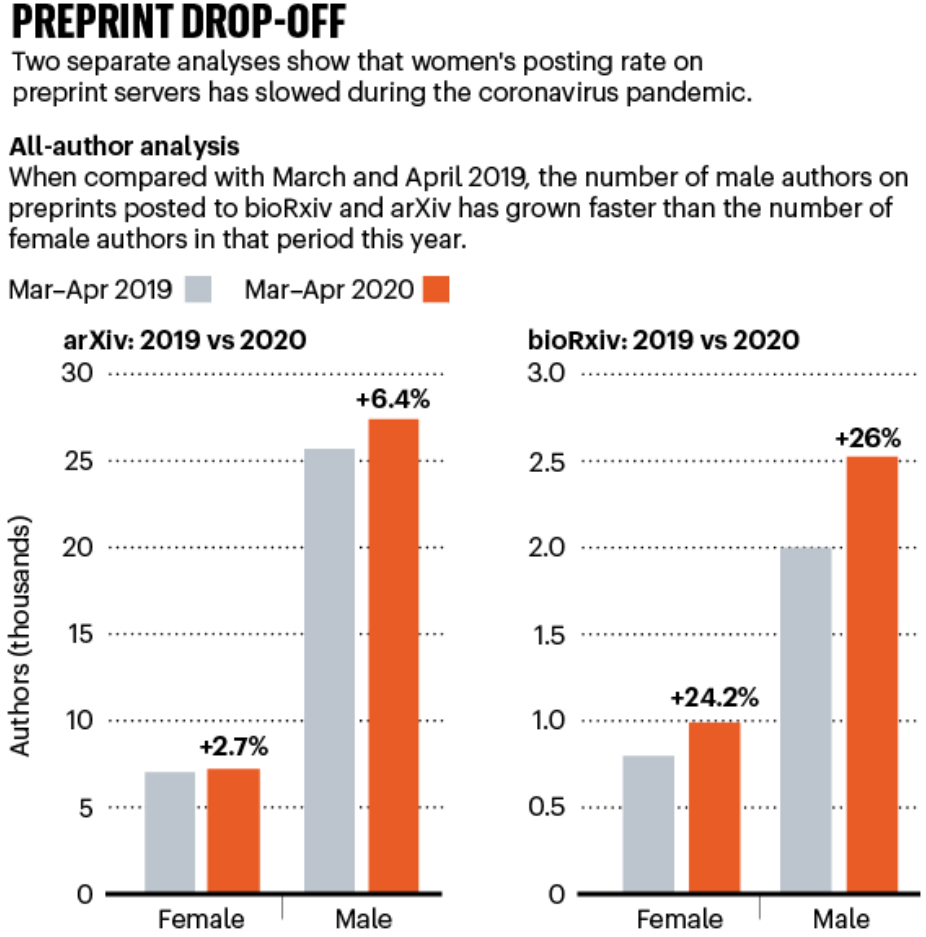
(**A**) The descendingly ordered citation rates shows that articles with male key authorships are more frequently cited than articles with female key authorships. The mean citation rate of 37.5 citations/article is depicted by a dotted line (Kruskal-Wallis test, (*): $p < .05$ (**): $p < .01$). (**B**) Average citation rates of both, ungrouped articles (bars) and articles that were grouped by the gender of their key authorships (lines), plotted as a function of the number of authors. Statistically, the citation rate of an article is higher the more authors are involved. The differences in citation rates between the two genders increase with the number of authors per article. (**C**) Gender-specific distribution of the number of articles per author. Women dominate the sub-groups 'author has 1 or 2 article(s)'. All other sub-groups are characterized by a relatively over-representation of male authors. This finding correlates with the higher productivity of male authors, as 61.0% male authors are responsible for 70.2% of all authorships.

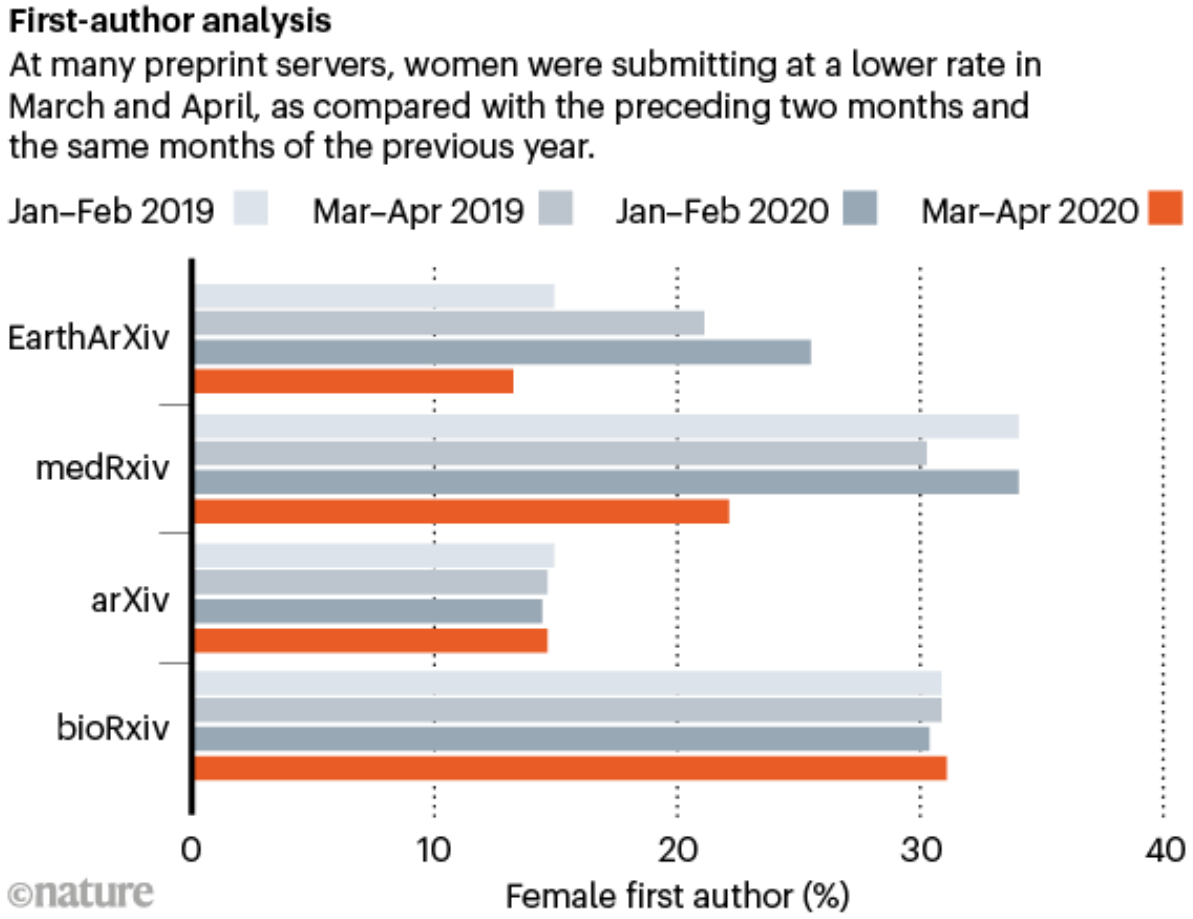
https://doi.org/10.1371/journal.pone.0189136.g005

& DURING THE CORONAVIRUS PANDEMIC?

https://www.nature.com/articles/d41586-020-01294-9

Also read: https://www.insidehighered.com/news/2020/04/21/early-journal-submission-data-suggest-covid-19-tanking-womens-research-productivity





PROMOTION & TENURE

Has a lot to answer for.

Photo by Gratisography from Pexels

OPEN VS CLOSED ACCESS AND WHO CAN AFFORD IT

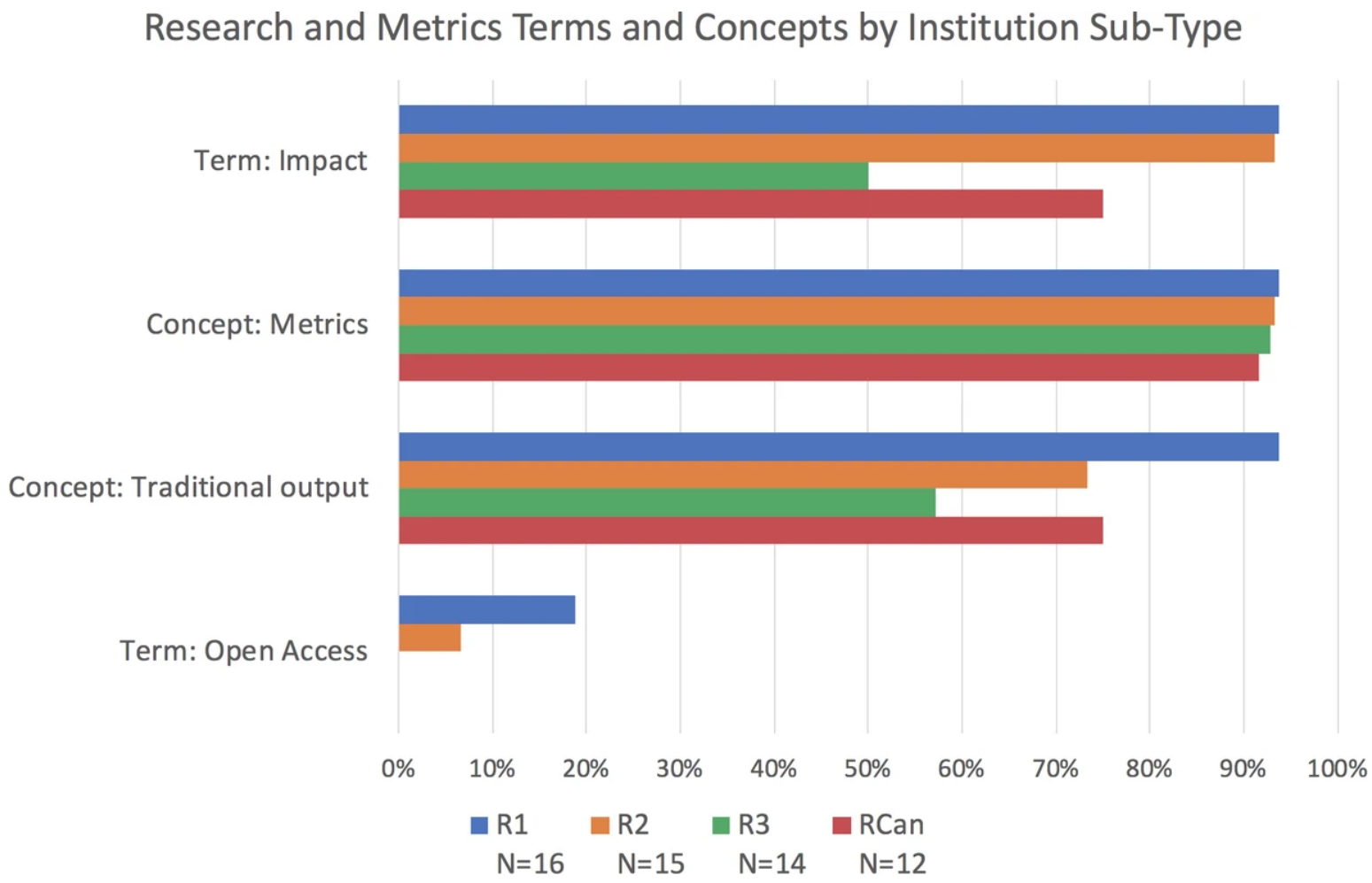
Meta-Research: How significant are the public dimensions of faculty work in review, promotion and tenure documents?

Figure 7:

Percentage of institutions mentioning terms and concepts related to research and metrics by institution sub-type.

Bars represent whether each term or concept (several terms and phrases) was identified within documents of doctoral/research-focused universities, from the most research intensive (R1; blue), to those that are less so (R2; orange, and R3; green), as well as the Canadian research universities (RCan; red). The term "impact" appears less in R3 institutions, and the concept of "metrics" appears to decrease with research intensity (with RCan institutions at similar levels to the R2 institutions from the US) However, the conditions for a chi-square test were not met to measure the significance of these differences.

https://doi.org/10.7554/eLife.42254.009



WHOSE VOICES ARE HEARD?

The Global North
vs
The Global South

THE GLOBAL SOUTH

	BMJ		Lancet		NEJM		JAMA		ANNALS		Total	
Editorials	261		350[4]		124		102		39		876	
UK	160	61.4%	167	47.7%	10	8.0%	02	1.9%	01	2.4%	340	38.8%
USA	38	14.6%	87	24.9%	97	78.3%	97	95.0%	35	90.0%	354	40.4%
OEAC[1]	56	21.4%	89	25.4%	14	11.3%	02	1.9%	03	7.6%	164	18.7%
RoW[2]	07	2.6%	07	2.0 %	03	2.4%	01	0.9%	00	0.0%	18	2.6%
Original papers	322		307		218		227		115		1189	
UK	216	67.0%	66	21.5 %	06	2.7%	04	1.8%	03	2.6%	295	24.8%
USA	22	7.0%	38	12.4%	107	49.1%	173	76.2%	81	70.4%	421	35.4%
OEAC	76	23.6%	136	44.3 %	78	35.8%	42	18.5%	23	20.0%	355	29.9%
RoW	08	2.4%	67	21.8%	27	12.4%	08	3.5%	08	7.0%	118	9.9%

Under-representation of developing countries in the research literature: ethical issues arising from a survey of five leading medical journals

http://doi.org/10.1186/1472-6939-5-5

Also read: http://doi.org/10.1177/0011392116680020

The average contribution of the RoW to the research literature in the five journals was 6.5%.

HIGHLIGHTING THE INEQUALITY

Subscription databases from big publishers cost big bucks

Global South can't afford to read

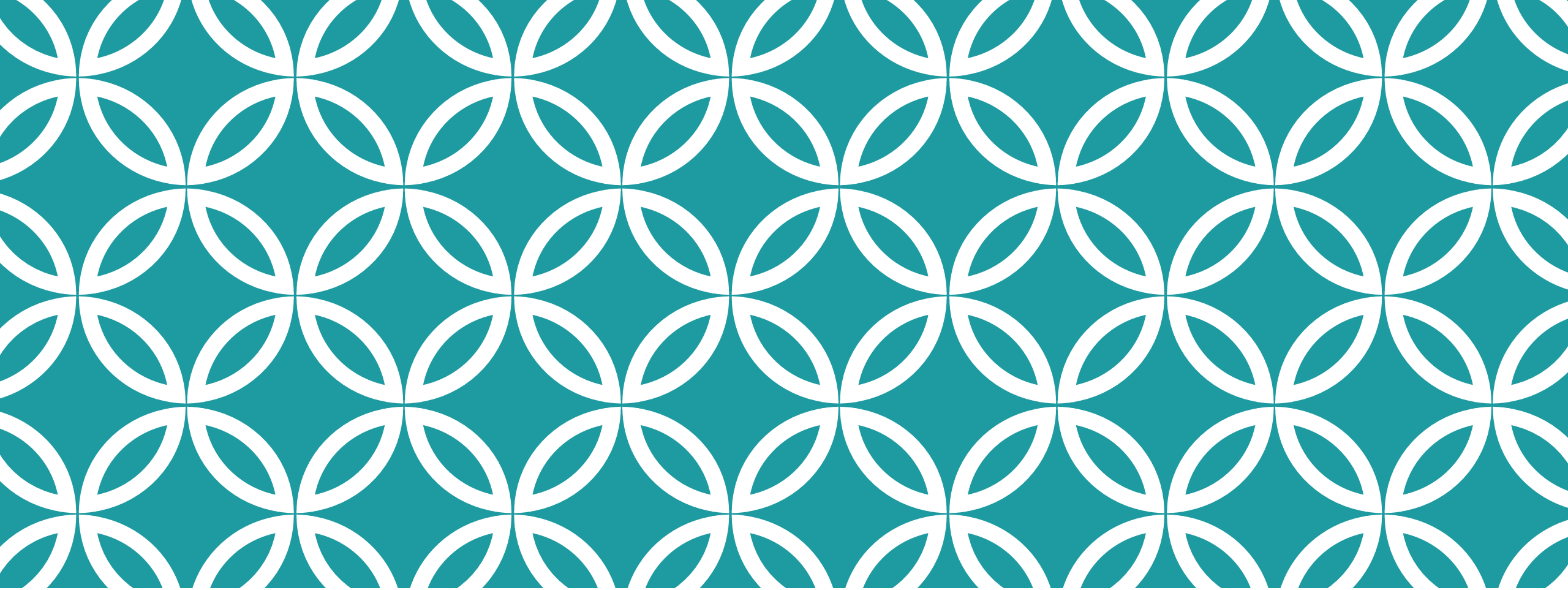
Article Processing Charges – fees to publish articles in journals

Global South can't afford to publish

Read-and-Publish Open Access deals – fees paid by consortia or institutions to allow for reading and publishing OA articles in top publishers' journals

Global South can't afford to read or publish

Suggested reading: https://blogs.lse.ac.uk/impactofsocialsciences/2020/02/21/read-and-publish-open-access-deals-are-heightening-global-inequalities-in-access-to-publication/



APC AND SUBSCRIPTION DATABASE COSTS

Known colloquially as publisher double-dipping

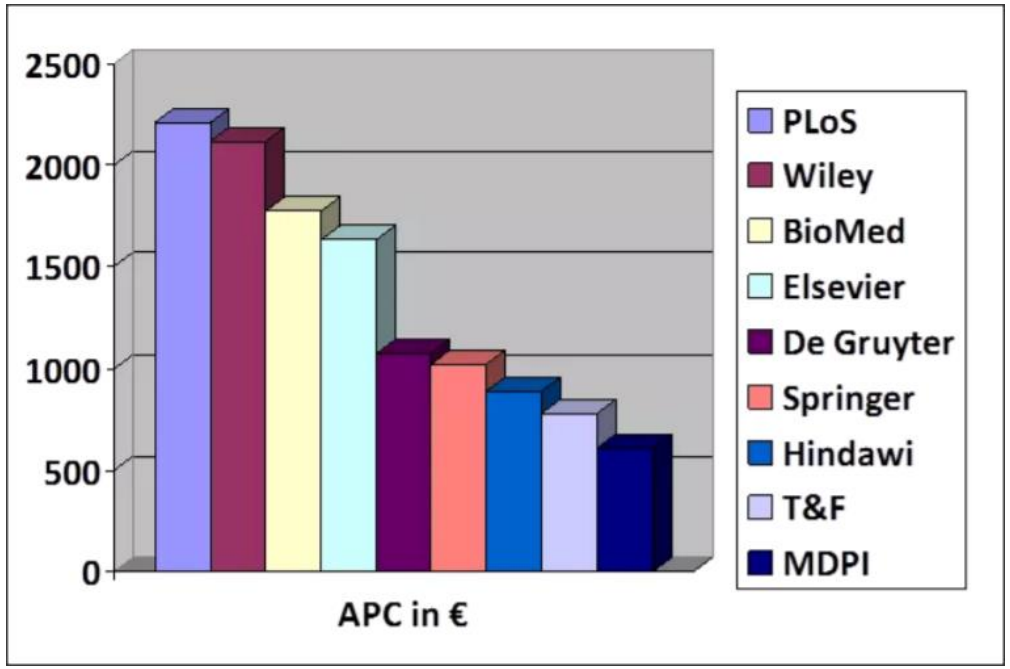
PRINT ➡ SUBSCRIPTION DATABASES

Photo by Kaboompics.com from Pexels

APC/HYBRIDS → OPEN ACCESS

Photo by Artem Beliaikin from Pexels

ARTICLE PROCESSING CHARGES IN SUBSCRIPTION JOURNALS



Source: B. Socha: How Much Do Top Publishers Charge for Open Access? (2017). Open Science. http://openscience.com/how-much-do-top-publisherscharge-for-open-access/

Varies widely:

- from $0 - $5,000

Who is paying?

- Author
- Funder
- Institution

CITATION BENEFITS

- 2005 study on open access articles 2.1% more likely to be cited 4-10 months after publication; 2.9% more likely after 10-16 months*
- 2012 study found that "48% of trials with publicly available microarray data received 85% of the aggregate citations. Publicly available data was significantly (p=0.006) associated with a 69% increase in citations…"**
- 2018 study: "OA articles receive 18% more citations than average"***

*Eysenbach, G. (2006) "Citation Advantage of Open Access Articles". *PLOS Biology* 4(5): e157. https://doi.org/10.1371/journal.pbio.0040157

**Piwowar, H. et al. (2007) "Sharing Detailed Research Data Is Associated with Increased Citation Rate". *PLOS One* 2(3): e308. https://doi.org/10.1371/journal.pone.0000308

***Piwowar, H.et al. (2018) "The state of OA: a large-scale analysis of the prevalence and impact of Open Access Articles". *PeerJ* 6: e4375 https://doi.org/10.7717/peerj.4375

CONSORTIAL DEALS: WHEELING AND DEALING

- Bibsam Consortium (Sweden) & Cambridge University Press (January 1, 2019)
  - Access and waives Article Processing Charges (APCs) for fully OA and hybrid OA journals
- Germany & Wiley (January 15, 2019)
  - Approximately $26 million USD for access and cost of APCs
- University of California system & Cambridge University Press (April 10, 2019)
  - Access and waives APCs for fully OA and hybrid OA journals
- Norway & Elsevier (April 23, 2019)
  - $10 million USD for access and publication up to 2,000 OA articles/year

https://sparcopen.org/our-work/big-deal-cancellation-tracking/

DATA FALSIFICATION AND REPLICABILITY

Basically, academics can be huge liars just like anybody else.

Photo by Connor Danylenko from Pexels

IOANNIDIS, J.P.A. (2005) WHY MOST PUBLISHED RESEARCH FINDINGS ARE FALSE. *PLOS MED 2* (8): E124.
https://doi.org/10.1371/journal.pmed.0020124

"Simulations show that for most study designs and settings, it is **more likely for a research claim to be false** than true. Moreover, for many current scientific fields, claimed research findings may often be simply accurate measures of the **prevailing bias**."

BERGMAN, A.B. (1997) WRONG TURNS IN SUDDEN INFANT DEATH SYNDROME RESEARCH. *PEDIATRICS 99* (1), PP. 119-121. https://pediatrics.aappublications.org/content/99/1/119.short

In 1972, in a landmark article, Dr. Alfred Steinschneider, took the data of five infant deaths in a family to be a sign that **SIDS was genetic**. Approaching SIDS as a genetic problem "offered hope that children at risk could be identified and saved," (L., 1995). It later came to light that **the children's mother murdered all five children**.

L., J.F. (1995) A housewife is convicted of murdering her five children. *Pediatrics 95*(6): a32. https://pediatrics.aappublications.org/content/95/6/A32

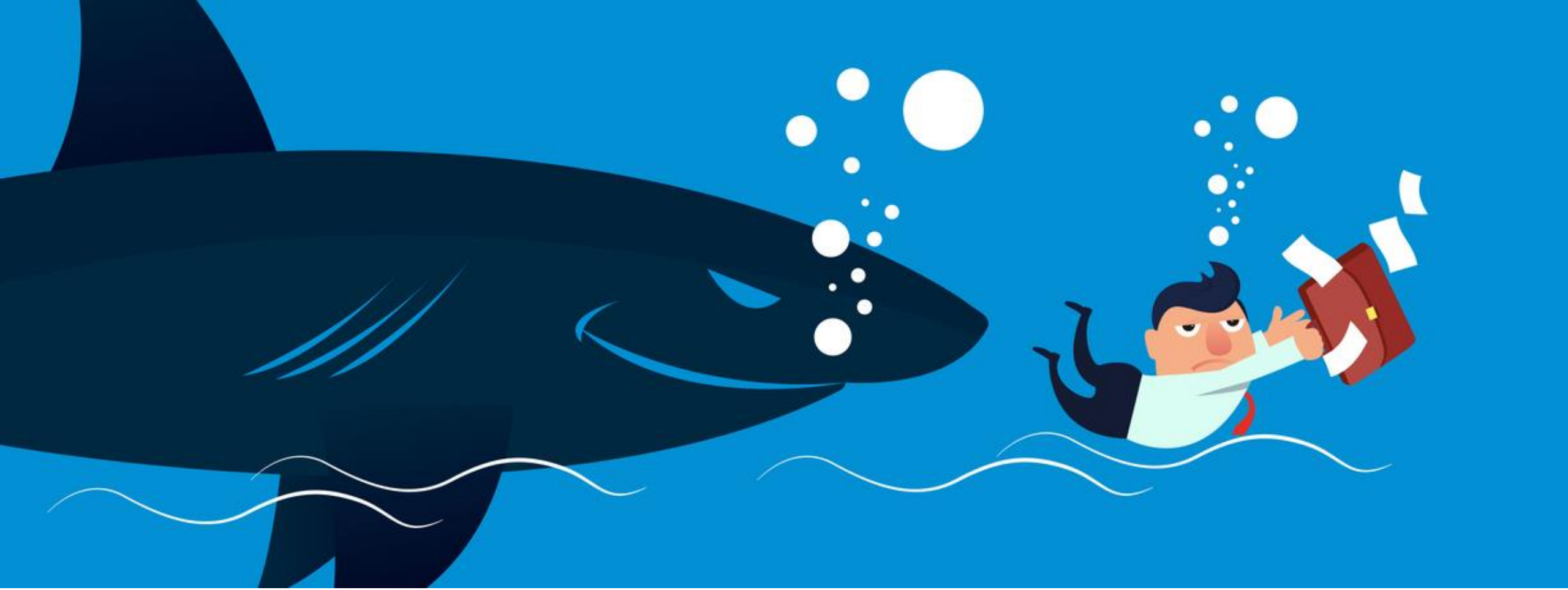
CHOPRA, V. & EAGLE, K.A. (2012) PERIOPERATIVE MISCHIEF: THE PRICE OF ACADEMIC MISCONDUCT. AMERICAN JOURNAL OF MEDICINE 125(10), PP. 953-955. https://doi.org/10.1016/j.amjmed.2012.03.014

Or we can examine the example of Dr. Don Poldermans, an infamous researcher in perioperative medicine with **over 500 peer-reviewed, published articles**. It came to light that Poldermans performed scientific misconduct, **lying about his research** in perioperative beta-blockers and statins in noncardiac surgery. His acts of **fraud** caused a domino effect amongst **researchers, patients, and grant agencies** that had funded him.

PRECLINICAL REPRODUCIBILITY AND ROBUSTNESS

https://f1000research.com/gateways/prr)

Photo by Chokniti Khongchum from Pexels



PREDATORY JOURNALS

"I know this dispossessed royal who just needs a wire transfer."

WHAT TO WATCH OUT FOR IN A PREDATORY JOURNAL

E-mailed invitations to submit an article

Journal's name suspiciously similar to another prominent in the field

Misleading geographic information in the title

Unprofessional website appearance

Insufficient contact information

Lack of editors or editorial board

Editors with no or fake academic credentials

Unclear author fee structures

Bogus impact factors

Invented metrics

False index claims

Peer review process

Lack of ISSN

"Instructions for authors“ page

Information is unavailable

Evaluate published articles

Publisher has a negative reputation

Author fees

Use common sense

Check the publisher address in Google Maps

Are you submitting your research to a trusted journal?

Publishing your research results is key to **advancing your discipline** – and your **career** – but with so many journals in your field, how can you be sure that you're choosing a **reputable**, **trustworthy** journal?

Tips to **confirm** a journal's credentials and decide if it will help you **reach** the right audience with your research, and make an **impact** on your career.

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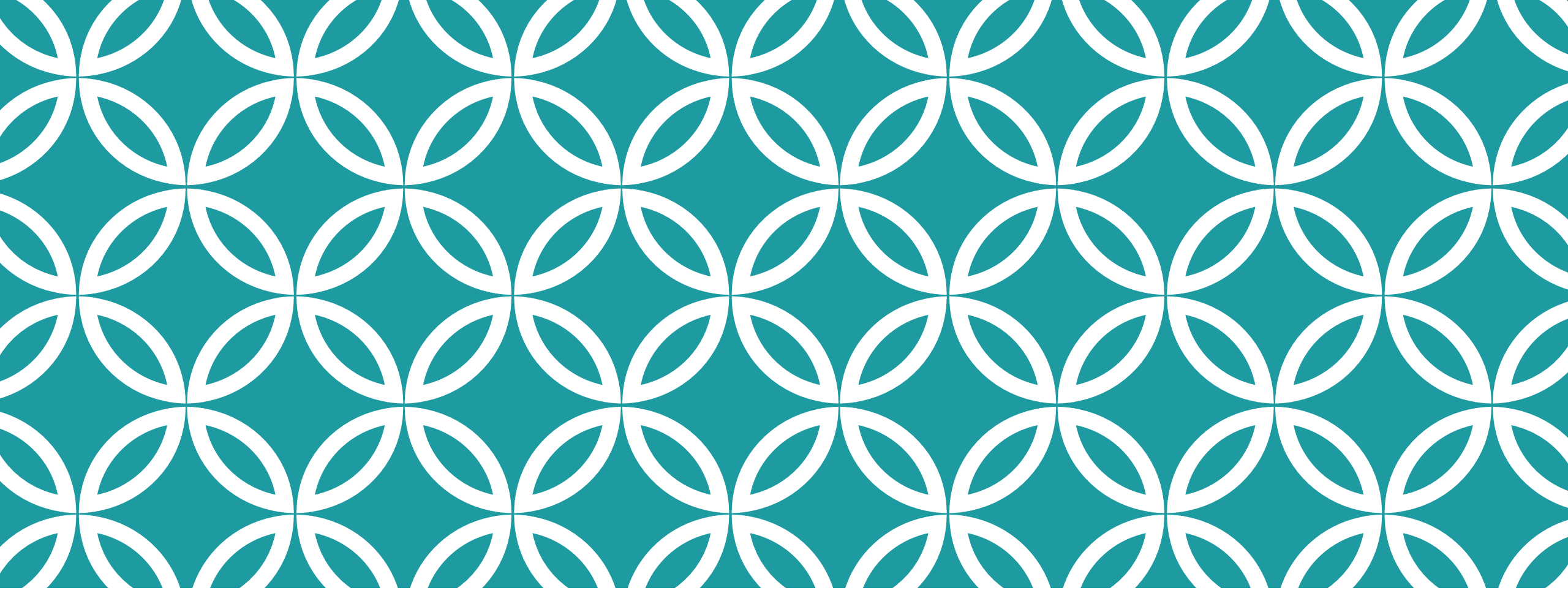
thinkchecksubmit.org



THE PEER REVIEW PROCESS

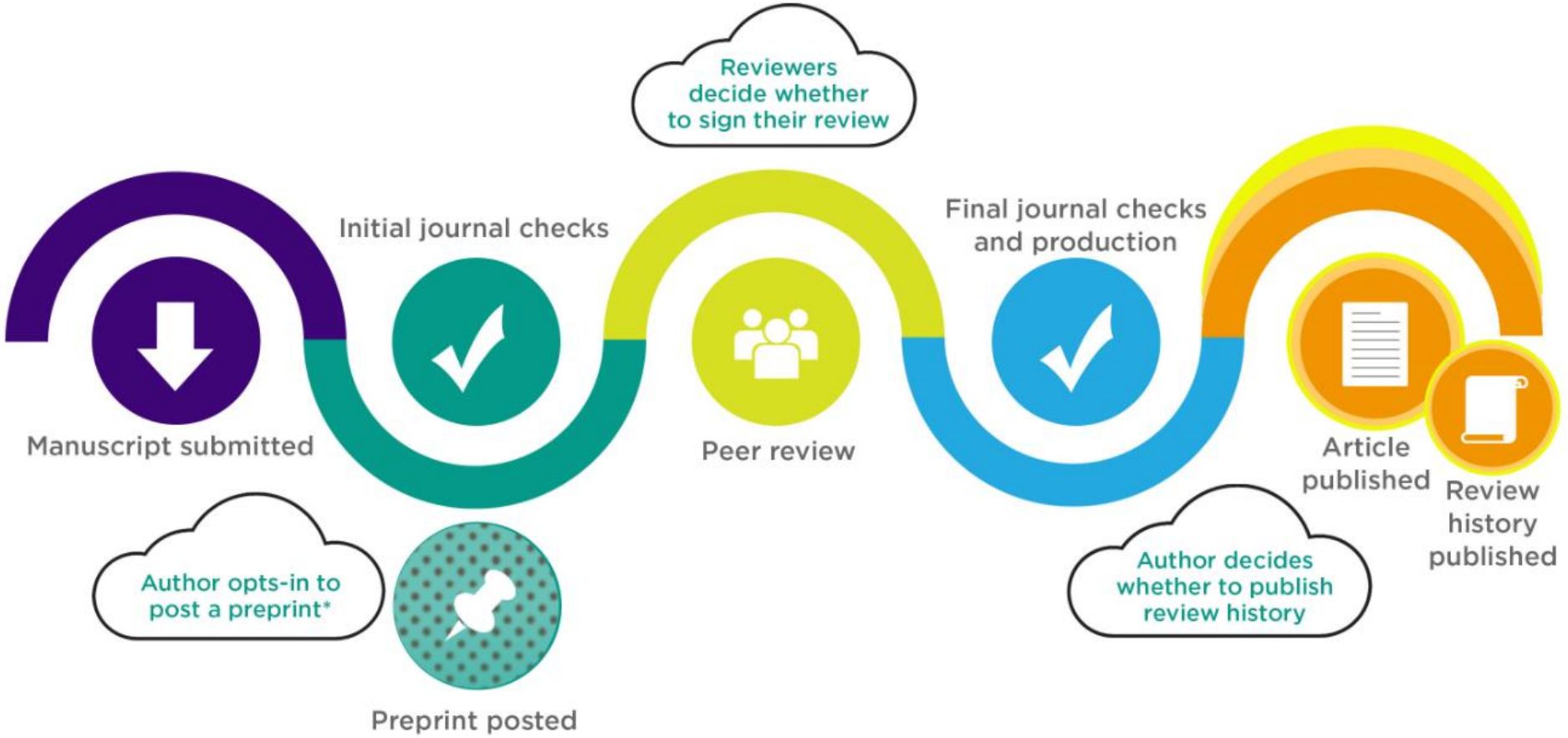
And how it can be conned.

SHAW, C. (2013) HUNDREDS OF OPEN ACCESS JOURNALS ACCEPT FAKE SCIENCE PAPER. *THE GUARDIAN* [ONLINE NEWSPAPER] RETRIEVED FROM https://www.theguardian.com/higher-education-network/2013/oct/04/open-access-journals-fake-paper

A scientist from Harvard University named John Bohannon, **submitted a fake article to 304 publishers**, of these it was "**accepted by 157** of the journals and rejected by 98. Of the 255 versions that went through the entire editing process to either acceptance or rejection, 60% did not undergo peer review. Of the **106 journals that did conduct peer review, 70% accepted the paper**."

LINDSAY, J.A., BOGHOSSIAN, P. AND PLUCKROSE, H. (2018) ACADEMIC GRIEVANCE STUDIES AND THE CORRUPTION OF SCHOLARSHIP. *AERO MAGAZINE* [ONLINE MAGAZINE] RETRIEVED FROM https://areomagazine.com/2018/10/02/academic-grievance-studies-and-the-corruption-of-scholarship/

The authors submitted 20 papers that mimicked articles in top journals but with bogus claims. They wrote the articles to *sound* good, but not to be accurate or scientific in any way. They had **7 papers accepted and 7 were under revise and resubmit** at the time they pulled the plug on the endeavour. In both of these examples, what is readily apparent is **a failure of the peer-review process**.



MAY 2019: PLOS JOURNALS – OPEN PEER REVIEW

https://blogs.plos.org/plos/2019/05/plos-journals-now-open-for-published-peer-review/

FUTURE SUGGESTIONS

Break the Publishing Industry

Open Access journals

Pre-print servers

Changes to Promotion & Tenure

Improve Peer Review process

Photo by Min An from Pexels

THE FUTURE IS FEMALE

Photos by
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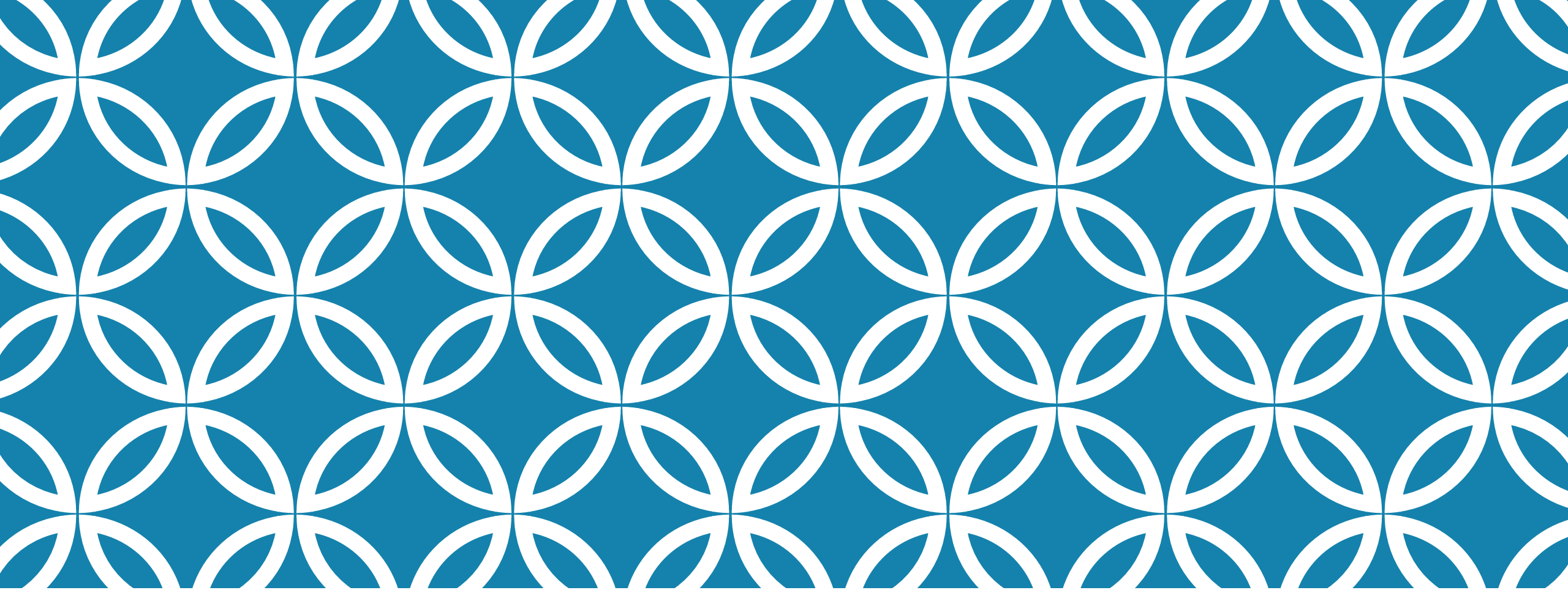
August de Richelieu from Pexels



THANKS FOR WATCHING!

Michele Gibney, Head of Publishing and Scholarship Support
mgibney@pacific.edu